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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

The Honorable John Bryant  
U.S. House of Representatives  
205 Cannon House Office Building  
Washington, D.C. 20515

Dear Congressman Bryant:

This letter responds to your correspondence concerning the Commission's Notice of Proposed Rulemaking (Notice) in PR Docket No. 93-61, to develop regulations for Automatic Vehicle Monitoring (AVM) systems operating in the 902-928 MHz band. In your letter you recognize the traditional hierarchy between licensed and unlicensed uses of the 902-928 MHz band, as well as the need to foster the continued development of both wide-area (multilateration) and local area (non-multilateration) AVM. You encourage a solution that will allow users of most types of unlicensed equipment to have a reasonable degree of assurance that their devices will still function.

As you know, the Commission has the responsibility for ensuring spectrum use that best serves the public interest. This often requires striking a balance among competing uses. The Commission must not only evaluate tangible effects, but also the potential benefit particular uses present. Determining the most beneficial use demands merging technical, economic and legal disciplines and is as difficult as it is complex. Parties participating in the proceeding have represented wide and varied views, including wide-area AVM service providers, local-area AVM providers, manufacturers and users of Part 15 equipment, and Amateur operators. The review of the 902-928 MHz band reflects the Commission's endeavor not simply to accept the status quo, but to implement a structure that best meets the public interest.

The shared use of 902-928 Mhz frequency band by various groups makes this challenge even more difficult. The present priorities for access to this band that have been established among these groups is an important starting point. Users with lower priority generally must accept interference from and may not cause interference to users that have a higher priority. Specifically, the 902-928 MHz band is primarily allocated for use by the federal government for Radiolocation, Fixed and Mobile services, yet the federal government users must accept interference from Industrial, Scientific and Medical (ISM) devices. Following the federal government and ISM devices on the priority scale are AVM systems. Next are Amateur radio operators and then the Part 15 users that are eligible to operate in this band. As the lowest priority, Part 15 users are not permitted to cause interference to any of the other users.

In the Part 15 area, the Commission is aware of the significant development in

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unlicensed devices. A range of new radio products serving the public and business have emerged, reflecting economic growth and productivity. Part 15 products operate in numerous frequency bands throughout the radio spectrum. In the 902-928 MHz band alone, the Commission has authorized more than 20 different types of products for operation in this spectrum to more than 130 manufacturers. The Commission receives about 20 applications a month for approval of products in this part of the spectrum.

With regard to AVM, the current interim rules governing operations of AVM systems have been in place for 20 years. The Commission's record reflects that AVM systems have become the focus of increased investment opportunities. There is significant promise for enhancing public safety and convenience through its ability to track vehicles, collect tolls, determine traffic patterns and congestion, and reroute traffic. Your experience in the Dallas area is reflective of the nationwide potential. Moreover, AVM holds substantial promise of enhancing the efficiency and effectiveness for private sector transportation activities. Overall, advocates assert that beyond the substantial economic and safety benefits that will accrue, AVM will reduce commuter travel time and highway congestion, as well as decrease energy consumption and pollution.

As you relate, one of the issues that must be resolved is the level of interference that can be tolerated among and between the various users of this spectrum. Some parties argue that some of the planned AVM systems, primarily those that would be used to track vehicles with multilateration technology, rely on weak signals that are easily interfered with. The source of the interference is generally perceived to emanate from Part 15 devices as well as other AVM systems. Advocates on behalf of Part 15 devices express similar concerns regarding interference but more significantly regarding Part 15 devices' non-interference requirements and the continued viability to operate in the 902-928 MHz band. As you can understand, the advocacy on behalf of any one party tends to urge the primacy of that party's own interests, exclusive of others.

The various issues that must be resolved essentially revolve around whether accommodation is possible. Beyond comprehending the legitimate expectations of consumers and manufacturers of Part 15 devices as well as recognizing the potential of AVM, is the need to adopt permanent rules regarding this band. The ability to expand the use of the band while at the same time determining the degree to which different users can coexist requires insight into technological limitations as well as the economic costs at stake. The proficiency of the parties themselves to resolve interference is a significant element. In weighing the various options and issues, ranging from the degree of spectrum sharing to the means of assigning licenses, the Commission is sincerely committed to a structure that will best enhance competition and choice.

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I appreciate very much receiving the thoughts on the range of issues in the AVM proceeding. The Commission is moving to resolve the matter and your views have been important to the Commission's evaluation. Please call upon me if I can provide any additional information.

Sincerely,

A handwritten signature in black ink, appearing to be 'REH', with a long horizontal flourish extending to the right.

Reed E. Hundt  
Chairman

**Congress of the United States**  
**House of Representatives**  
**Washington, D.C. 20515-4305**

**JOHN BRYANT**  
5TH DISTRICT, TEXAS  
CHAIRMAN  
SUBCOMMITTEE ON  
ADMINISTRATIVE LAW AND  
GOVERNMENTAL RELATIONS

September 20, 1994

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COMMITTEE ON  
ENERGY AND COMMERCE  
COMMITTEE ON  
THE JUDICIARY  
COMMITTEE ON  
THE BUDGET

The Honorable Reed E. Hundt, Chairman  
Federal Communications Commission  
1919 M Street, NW  
Washington, D.C. 20554

Dear Mr. Chairman:

I understand that you and your fellow members of the Commission will soon conclude your consideration of Docket 93 - 61 on the allocation of spectrum in the 902 - 928 MHz band. I am interested in how your deliberations will impact on the use of automatic vehicle monitoring (AVM) technologies.

The opportunity to use our communications and information resources to gain more efficient use of our system of roads and highways holds great promise for the Texans and the nation as a whole. This leveraging of resources can come about through the use of AVM technologies.

There are two broad categories of AVM: local-area and wide-area. The two serve different, but largely complementary needs. Local-area AVM is already expediting the commutes of tens of thousands in Dallas and Houston through the use of electronic toll and traffic management. The same technology facilitates the efficient movement of ground transportation vehicles at the Dallas-Ft. Worth airport.

Developers of wide-area AVM technology are showing in both Texas and in the nation's capital that its use can lead to safer and more efficient use of our streets. Texas companies have been in the forefront of the development and deployment of AVM. Both types of AVM can promote public safety and transportation efficiency with concomitant savings in time and energy for those using our roadways. Both can play important roles in the development of an Intelligent Vehicle Highways System.

Sound spectrum management should foster the continued development of both types of AVM. This can happen only if the Commission maintains reasonable policies designed to limit the degree of interference caused to AVM systems. For these reasons, I urge you and your colleagues to reach decisions in Docket 93-61 pertaining to AVM that maintain the traditional hierarchy between licensed and unlicensed uses of the spectrum.

Honorable Reed Hundt  
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Recognizing the importance of unlicensed devices like low- powered automatic utility meter reading equipment and cordless telephones, however, I would also encourage you to work for solutions that will allow users of most types of unlicensed equipment to have a reasonable degree of assurance that their devices will still function, while complying with the non-interference requirements needed by those making unlicensed use of the spectrum.

The 902-928 MHz band under consideration in Docket 93-61 has long been a shared band featuring not less than five hierarchical categories, with lower priority users accommodating higher priority users. In this band, the hierarchy and shared use concept should not be altered.

You also have the opportunity to craft solutions that will encourage competition among AVM providers. The market has already set the stage for this in the local-area AVM arena, with more than half a dozen companies competing actively to provide such systems. The model for wide-area AVM should also be one of robust competition. I strongly urge you not limit arbitrarily the number of wide-area AVM providers in a market to only two or three. Instead, you should work for solutions that accommodate a variety of technical approaches with reasonable assurance of open entry.

In this way, the marketplace will dictate the best approaches to wide-area AVM as new technologies emerge. Such an approach should also provide an opportunity for local governments to hold licenses for their own wide-area systems. These goals of competition and entry can best be met through continued shared use of the spectrum.

I support the Commission's competitive bidding process, but I do not believe that Congress intended auctions to be used in situations where spectrum has been shared with the federal government, and will continue to be shared among a variety of federal government and non-government users - including those local governments that may seek to become AVM licensees in support of public safety and transportation.

Thank you for the opportunity to share my views on this matter. I look forward to your decisions that ultimately will benefit a wide variety of users of the 902-928 MHz band and establish a sound foundation for the continued development of AVM in a competitive environment.

Sincerely,

  
JOHN BRYANT  
Member of Congress

Honorable Reed Hundt  
September 20, 1994

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cc: The Honorable James Quello  
The Honorable Andrew Barrett  
The Honorable Rachelle Chong  
The Honorable Susan Ness